



Illustration may differ



Ordering information

Type	Part no.
CQ28-10NNP-KW1	6030133

Other models and accessories → www.sick.com/CQ

Detailed technical data

Features

Housing	Rectangular
Dimensions (W x H x D)	28 mm x 46 mm x 5.5 mm
Sensing range S_n	1 mm ... 10 mm
Safe sensing range S_a	7.2 mm
Installation type	Non-flush
Switching frequency	10 Hz
Connection type	Cable, 4-wire, 2 m ¹⁾
Switching output	NPN
Switching output detail	NPN
Output function	NC or NO
Electrical wiring	DC 4-wire
Adjustment	
	Teach-in button Sensitivity
	Wire/pin Sensitivity
Enclosure rating	IP68 ²⁾

¹⁾ Do not bend below 0 °C.

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2.5 V DC ¹⁾

¹⁾ At I_a max.

²⁾ Without load.

³⁾ Of S_r .

⁴⁾ Supply voltage U_B and constant ambient temperature T_a .

⁵⁾ In EMC critical applications, conducted interference levels may lie within the frequency range of the oscillator. This can cause changes to the output signal. (See operating instructions.).

Current consumption	12 mA ²⁾
Time delay before availability	≤ 300 ms
Reproducibility	≤ 5 % ^{3) 4)}
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2 ⁵⁾
Continuous current I_a	≤ 200 mA
Cable material	PVC
Conductor size	0.14 mm ²
Short-circuit protection	✓
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
Ambient operating temperature	-20 °C ... +85 °C
Ambient temperature, storage	-40 °C ... +85 °C
Housing material	Plastic, PBT
Sensing face material	Plastic
UL File No.	NRKH.E191603

1) At I_a max.

2) Without load.

3) Of S_r.

4) Supply voltage U_B and constant ambient temperature T_a.

5) In EMC critical applications, conducted interference levels may lie within the frequency range of the oscillator. This can cause changes to the output signal. (See operating instructions.).

Safety-related parameters

MTTF_D	1,112 years
DC_{avg}	0 %
T_M (mission time)	20 years

Reduction factors

Note	The values are reference values which may vary
Metal	1
Water	1
PVC	Approx. 0.4
Oil	Approx. 0.25
Glass	0.6
Ceramics	0.5
Alcohol	0.7
Wood	0.2 ... 0.7

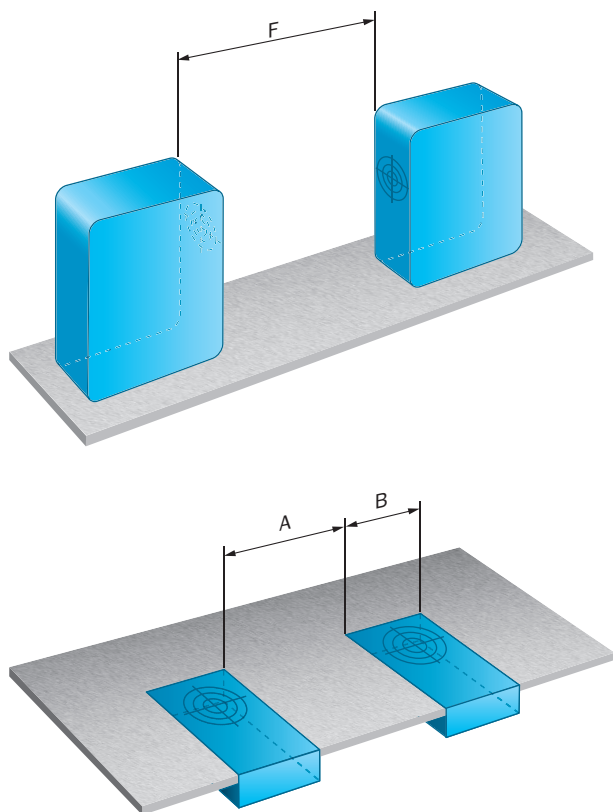
Installation note

Remark	Associated graphic see "Installation"
A	27.6 mm
B	27.6 mm
F	6 x S _n (max. 60 mm)

Classifications

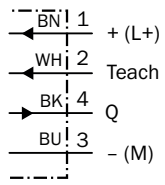
ECLASS 5.0	27270102
ECLASS 5.1.4	27270102
ECLASS 6.0	27270102
ECLASS 6.2	27270102
ECLASS 7.0	27270102
ECLASS 8.0	27270102
ECLASS 8.1	27270102
ECLASS 9.0	27270102
ECLASS 10.0	27270102
ECLASS 11.0	27270102
ECLASS 12.0	27274201
ETIM 5.0	EC002715
ETIM 6.0	EC002715
ETIM 7.0	EC002715
ETIM 8.0	EC002715
UNSPSC 16.0901	39122230

Installation note

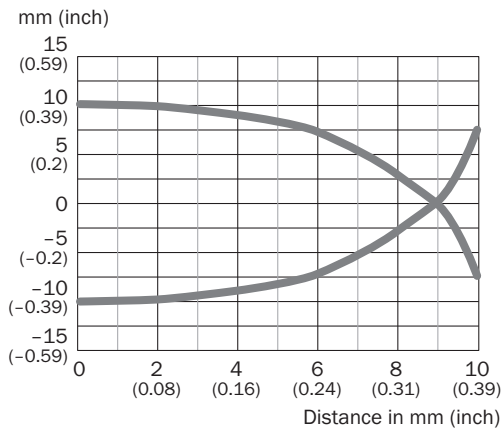


Connection diagram

Cd-023

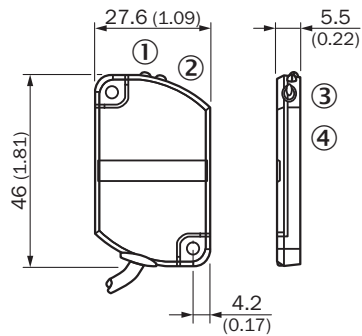


Response diagram



Dimensional drawing (Dimensions in mm (inch))

CQ28, cable



- ① LED indicator green
- ② LED indicator yellow
- ③ Teach-in button
- ④ Sensing face

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We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

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